

Application No. 10/609,314
Amendment "A" dated February 28, 2006
Reply to Office Action mailed November 30, 2005

REMARKS

The Office Action, mailed November 30, 2005, considered claims 1-40. Claims 3, 4, 7, 8, 9, 16, 17, 20, 21, 22, 30, 35 and 36 were objected to under 37 C.F.R. 1.75(c), as being of improper dependent form for failing to further limit subject matter of a previous claims. Claims 5-9, 12, 13, 18-22, 25, 26, 29, 30 and 34-36 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-40 were rejected under 35 U.S.C. 103(a) as being unpatentable over Knowlton (U.S. Patent No. 6,157,389) in further view of Sekiguchi et al. (U.S. Publication No. 2001/0004739)¹

By this paper, claims 1, 5, 8, 9, 14 and 27-38 have been amended and new claims 41-48 have been added, such that claims 1-48 remain pending, and of which claims 1, 14, 27, 32 and 38 are the only independent claims at issue. Support for the amendments and new claims is found throughout the specification, including the disclosure found in paragraphs [0028]-[0034].

The claims are generally directed to embodiments for reducing memory requirements for displaying tables in a user interface. As recited in claim 1, for example, a method of reducing memory requirements is recited that is implemented within a grid control for displaying a user interface comprising a table that is a visual representation of a database and that enables a user to read and interact with content of the database, wherein the grid control comprises a plurality of cell objects organized as a plurality of row objects and one or more column objects, wherein for each of the plurality of row objects, one or more user interface characteristics are stored in one or more row characteristic objects. The memory requirements are reduced by for the grid control and corresponding table UI by sharing a single row characteristic object between two or more row objects. In particular, a first row object that comprises one or more first cell objects is created for use in organizing the one or more first cell objects and data associated with the one or more first cell objects and for presenting the data within the grid control on the table UI. A

¹ Although the prior art status and some of the assertions made with regard to the cited art is not being challenged at this time, inasmuch as it is not necessary following the amendments and remarks made herein, which distinguish the claims from the art of record, Applicants reserve the right to challenge the prior art status and assertions made with regard to the cited art, as well as any official notice, which was taken in the last office action, at any appropriate time in the future, should the need arise, such as, for example in a subsequent amendment or during prosecution of a related application. Accordingly, Applicants' decision not to respond to any particular assertions or rejections in this paper should not be construed as Applicant acquiescing to said assertions or rejections.

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second, similar row object is also created for the same general purpose. A row characteristic object is then created, which is also used for determining how the data associated with the one or more first and second cell objects should be presented. The row characteristic object links the first and second row objects through an index, such that the row characteristic object is shared between the first and second row objects. However, the data associated with each of the one or more first and second cell objects separately from the first and second cell objects where characteristic information for each corresponding cell object is located.

Claim 14 is similar to claim 1, except that it recites functional "step for" language, which invokes interpretation under §112 paragraph 6, rather than using the non-functional "acts" language recited in claim 1. It will be noted, in this regard, that the double patenting rejection should be withdrawn, inasmuch as claims 14-37 are not substantial duplicates of claims 1-13, since they statutorily require different interpretations.

Claims 27 and 32 are directed to corresponding computer program products for implementing the methods recited in claims 1 and 14, respectively.

Finally, claim 38 is directed to a related computer program product comprising routines for creating the row characteristics and row objects.

There were several objections to the claims (corresponding to claims 3, 4, 7, 8, 9, 16, 17, 20, 21, 22, 30, 35 and 36). Claims 5, 8, 9 also had minor informalities which resulted in §112 rejections. By this paper, claims 5, 8, 9 have been amended to overcome the foregoing objections.

Claims 6-9 were also interpreted as being substantially similar to claims 2-4 and claims 12-13 were viewed as substantially similar to claims 10 and 11. Applicants respectfully submit, however that these claims should not be interpreted as being substantially similar inasmuch as claims 6-9 and 12-13 incorporate the limitations of claims 5, which requires the following:

creating one or more column objects associated with the one or more first and second cell objects, wherein a cell characteristic for each of the one or more first and second cell objects for use in presenting the data associated with the one or more first and second cell objects can be determined by either the row characteristic object or a column characteristic object.

Inasmuch as claims 2-4 and 10-11 do not require the foregoing limitations from claim 5, they should not be viewed as substantially similar to claims 6-9 and 12-13.

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Now, with regard to the cited art (Knowlton and Sekiguchi), Applicants respectfully submit that the cited art is not analogous to the present invention. Whereas, the present invention corresponds to memory constraints and issues relating to spreadsheets, tables and other database user interfaces, the cited art does not appear to have any relation to this technology. Instead, the cited art corresponds generally to image rendering, with Knowlton focused on methods for reducing the size of an image and Sekiguchi focused on image retrieval.

Because of the great disparity between the cited art and the claimed invention, it make is difficult to address the rejections of record. Accordingly, rather than address each individual assertion or rejection, Applicants respectfully submit that the cited art fails to read on claims, such as the recited claims, that correspond to methods for reducing memory requirements of the grid control by sharing a single row characteristic object between two or more row objects, particularly when the grid control is for displaying a user interface comprising a table that is a visual representation of a database and that enables a user to read and interact with content of the database, as further clarified by the amendments made to each of the independent claims.

The cited disclosure also clearly fails to disclose or suggest any such method or system wherein the data associated with each of the one or more first and second cell objects is stored separately from the first and second cell, as recited in each of the independent claims. (see paragraphs 28-29).

Although the foregoing remarks have focused primarily on the independent claims, it will be appreciated that, for at least the foregoing reasons, all of the other rejections and assertions of record with respect to the remaining claims, including the dependent claims, are now moot, and therefore need not be addressed individually.

Although it is not necessary to address the dependent claims, Applicants will address some of the new dependent claims to even further distinguish the invention from the art of record and any new art that might be found in a subsequent search by the Examiner.

For example, Applicants respectfully submit that the cited art clearly fails to disclose a method as recited in claim 1, wherein the method further comprises determining whether a row can be shared (see claim 41), or wherein determining whether a row can be shared includes determining whether each individual cell within a collection of cells for a row object can be deduced from an owning column and an owning row object (claim 42), or wherein determining whether a row can be shared includes determining whether inherent characteristics and actual

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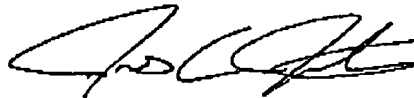
characteristics of the cells for a row are compatible (claim 43). The cited disclosure also fails to indicate that a state list is maintained with state information that is redundant with state information maintained for each row (claim 44), wherein the state list enables a state of a particular row having a shared row characteristic with another row characteristic of an other row to be changed without unsharing the row characteristics of the particular row and the other row (claim 45). In fact, no mention appears to be made regarding the unsharing of a row that was previously shared through the link of the row characteristic object to the first and second row objects (claim 46), let alone where the unsharing is initiated by a user request for an index to a row (claim 47) or by a user request for a change to a characteristic of the row (claim 48).

For at least the foregoing reasons, Applicants respectfully submit that the pending claims are in condition for prompt allowance.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 28 day of February, 2006.

Respectfully submitted,



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